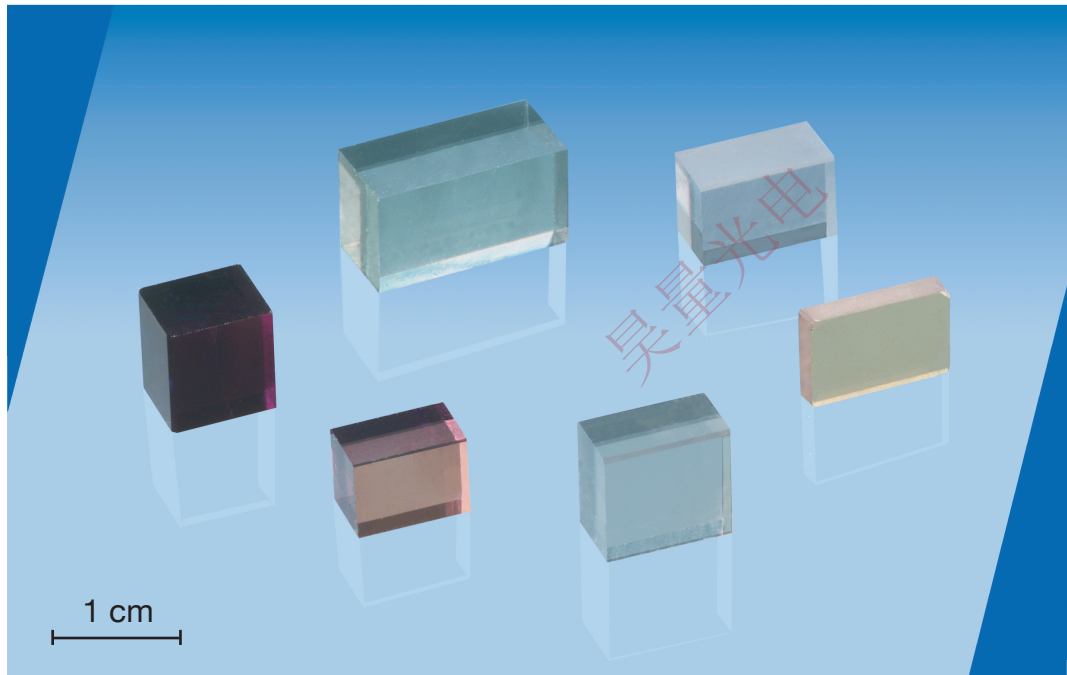


## Photorefractive **KNbO<sub>3</sub>**



### Standard Features

- high quality crystals doped with Rh, Fe, Mn, and Ni for photorefractive applications in the infrared
- very low scattering losses

### Optional Features

- high photosensitivity up to 1000 nm wavelength
- milliseconds response time

### Applications

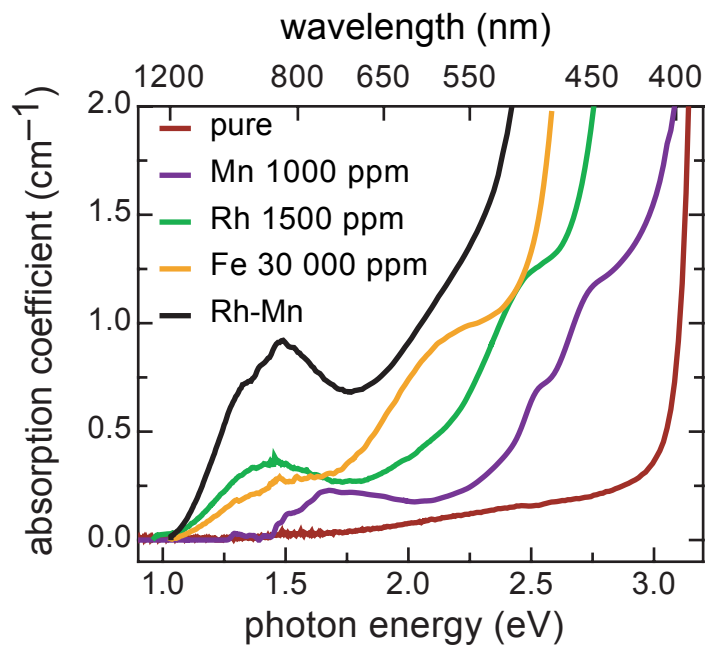
- photorefractive applications with laser diodes
  - dynamic holography and optical phase conjugation in the visible and near infrared
-

## Photorefractive grating recording times

(selected KNbO<sub>3</sub> crystals at different wavelengths for I = 1 W/cm<sup>2</sup>)

Crystal	Wavelength [nm]	Recording time (typical) [s]
KNbO <sub>3</sub> :Fe	488	1
KNbO <sub>3</sub> :Mn	515 860	1 3
KNbO <sub>3</sub> :Fe reduced	488 515	0.01 0.01
KNbO <sub>3</sub> :Rh reduced	860 1064	0.5 50

## Absorption Spectra



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